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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,243	02/14/2006	Lars Lehmann Hylling Christensen	10450.204-US	9685

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NOVOZYMES NORTH AMERICA, INC.
500 FIFTH AVENUE
SUITE 1600
NEW YORK, NY 10110

EXAMINER	
WOOD, AMANDA P	

ART UNIT	PAPER NUMBER
1657	

MAIL DATE	DELIVERY MODE
08/21/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/568,243	CHRISTENSEN ET AL.	
	Examiner	Art Unit	
	AMANDA P. WOOD	1657	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *1* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 April 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *10-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *10-20* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Applicant's election of claims 19-20 and the glycosyl hydrolase of family 15 in the reply filed on 30 April 2008 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Upon further review of the claims, the Examiner has determined that further restriction of the claims is required. The restriction requirement dated 4 April 2008 has been withdrawn in view of the need for further restriction of the claims.

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 10, in part, and 11-18, drawn to a method for determining the concentration of a glycosyl hydrolase by active site titration using an inhibitor having a Kd which is at least 25 times lower than the concentration of glycosyl hydrolase.

Group II, claim(s) 10, in part, and 11-18, drawn to a method for determining the concentration of a glycosyl hydrolase by active site titration, when the glycosyl hydrolase is a retaining glycosyl hydrolase, using a substrate wherein the rate constant for the glycosylation step is at least 10 times larger than for the deglycosylation site.

Group III, claim(s) 19, in part, and 20, drawn to a method of screening for a property of a glycosyl hydrolase wherein the property is dependent on the concentration of the glycosyl hydrolase, comprising determining the concentration of the glycosyl hydrolase of each position of the spatial array by active-site titration using an inhibitor having a Kd which is at least 25 times lower than the concentration of glycosyl hydrolase.

Group IV, claim(s) 19, in part, and 20, drawn to a method of screening for a property of a glycosyl hydrolase wherein the property is dependent on the concentration of the glycosyl hydrolase, comprising when the glycosyl hydrolase is a retaining glycosyl hydrolase, determining the concentration of the glycosyl hydrolase of each position of the spatial array by active-site titration using a substrate wherein the rate constant for the glycosylation step is at least 10 times larger than for the deglycosylation step.

The inventions listed as Groups I-IV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The common feature among claims 10 and 19 is a method relating to active site titration of a glycosyl hydrolase using an inhibitor, however, this method was well-known in the art at the time the claimed invention was made (see, for example, Hansen et al, ChemBioChem 2000, as cited in the IDS filed 14 February 2006). Furthermore, within claims 10 and 19, there is no single general inventive concept because two different methods are disclosed in each of these claims (i.e., a method of using an inhibitor to determine enzyme concentration by active-site titration, and a method of using a substrate with a particular rate constant to determine enzyme concentration by active-site titration, when retaining glycosyl hydrolases are to be determined).

Election of Species

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

Glycosyl hydrolase belonging to family 13

Glycosyl hydrolase belonging to family 14

Glycosyl hydrolase belonging to family 15

Glycosyl hydrolase belonging to family 31

Glycosyl hydrolase belonging to family 57

Glycosyl hydrolase belonging to family 63

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The claims are deemed to correspond to the species listed above in the following manner:

Glycosyl hydrolase belonging to family 13, as in claims 13

Glycosyl hydrolase belonging to family 14, as in claim 14

Glycosyl hydrolase belonging to family 15, as in claim 15

Glycosyl hydrolase belonging to family 31, as in claim 16

Glycosyl hydrolase belonging to family 57, as in claim 17

Glycosyl hydrolase belonging to family 63, as in claim 18

The following claim(s) are generic: 10, 11, 12, 19, and 20.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or

corresponding special technical features for the following reasons: The various different enzymes belonging to the different glycosyl hydrolase families in claims 13-18 have a wide array of different properties, functions, and features, and are found in various different organisms. Therefore, these enzymes do not share a single general inventive concept that would unite than as having a special technical feature.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Conclusion

No claims allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AMANDA P. WOOD whose telephone number is (571)272-8141. The examiner can normally be reached on M-F 8:30AM -5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jon Weber can be reached on (571) 272-0925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

APW
Examiner
Art Unit 1657

/Lisa J. Hobbs/
Primary Examiner, Art Unit 1657